

Amendments to the Claims:

Please amend claims 1 and 27 as follows and add new claims 53-61:

1. (currently amended) A conjugate consisting essentially of an antibody fragment covalently modified by one or two nonproteinaceous polymer molecules at a free sulfhydryl group of a cysteine residue within the hinge region of the antibody fragment, wherein (a) the apparent molecular weight of the conjugate, as determined by size exclusion chromatography, is at least about 500 kD, and (b) the average actual molecular weight of each nonproteinaceous molecule is at least 20 kD, and (c) wherein the antibody fragment has an antigen binding site that binds human interleukin-8 (IL-8) comprises an anti-IL-8 monoclonal antibody light chain sequence comprising amino acids 1-219 of the humanized antibody light chain 6G4.2.5v11 (SEQ ID NO: 51).

2-26. (canceled)

27. (previously presented) The conjugate of claim 1, wherein the antibody fragment is selected from the group consisting of Fab, Fab', and Fab'-SH modified by one PEG molecule having an average actual molecular weight of about 30 kD.

28-34. (canceled)

35. (withdrawn) A polypeptide selected from the group consisting of: (1) a polypeptide that is an anti-IL-8 monoclonal antibody or antibody fragment comprising a light chain amino acid sequence comprising the complementarity determining regions of the light chain polypeptide amino acid sequence of Fig. 36; and (2) a polypeptide that is an anti-IL-8 monoclonal antibody or antibody fragment comprising a light chain amino acid sequence comprising the complementarity determining regions of the light chain polypeptide amino acid sequence of Fig. 45.

36. (withdrawn) The polypeptide of claim 35, wherein the light chain amino acid sequence comprises the complementarity determining regions of the light chain polypeptide amino acid sequence of Fig. 45.

37. (withdrawn) The polypeptide of claim 35 that further comprises a heavy chain amino acid sequence comprising the complementarity determining regions of the heavy chain polypeptide amino acid sequence of Figs. 37A-37B.

38. (withdrawn) The polypeptide of claim 35 wherein the light chain amino acid sequence is selected from the group consisting of: (1) a light chain amino acid sequence comprising amino acids 1-219 of the light chain polypeptide amino acid sequence of Fig. 36; and (2) a light chain amino acid sequence comprising amino acids 1-219 of the light chain polypeptide amino acid sequence of Fig. 45.

39. (withdrawn) The polypeptide of claim 38 wherein the light chain amino acid sequence comprises amino acids 1-219 of the light chain amino acid sequence of Fig. 45.

40. (withdrawn) The polypeptide of claim 38 that further comprises a heavy chain amino acid sequence comprising amino acids 1-230 of the heavy chain polypeptide amino acid sequence of Figs. 37A-37B.

41. (withdrawn) The polypeptide of claim 40, wherein the heavy chain amino acid sequence is fused at its C-terminus to a leucine zipper amino acid sequence.

42. (withdrawn) The polypeptide of claim 41, wherein the leucine zipper sequence comprises amino acids 231-275 of the heavy chain polypeptide amino acid sequence of Figs. 37A-37B.

43. (withdrawn) The polypeptide of claim 35 that is an antibody fragment selected from the group consisting of Fab, Fab', Fab'-SH, Fv, scFv and F(ab')₂.

44. (withdrawn) The polypeptide of claim 38 that is a F(ab')₂ antibody fragment, wherein the antibody fragment comprises a first heavy chain amino acid sequence and a second heavy chain amino acid sequence each comprising amino acids 1-238 of the heavy chain polypeptide amino acid sequence of Figs. 37A-37B, and wherein each of the Cys residues at positions 231 and 234 in the first heavy chain

amino acid sequence is in a disulfide linkage with the identical Cys residue in the second heavy chain amino acid sequence.

45. (withdrawn) The polypeptide of claim 38 that is a Fab' or Fab'-SH antibody fragment, wherein the antibody fragment comprises a heavy chain amino acid sequence comprising amino acids 1-233 of the heavy chain polypeptide amino acid sequence of Fig. 53.

46. (withdrawn) The polypeptide of claim 35 that is an antibody.

47. (withdrawn) A nucleic acid molecule that comprises a nucleic acid sequence encoding the polypeptide of claim 35.

48. (withdrawn) An expression vector comprising the nucleic acid molecule of claim 47 operably linked to control sequences recognized by a host cell transfected with the vector.

49. (withdrawn) A host cell comprising the vector of claim 48.

50. (withdrawn) A method of producing a polypeptide, comprising culturing the host cell of claim 49 under conditions wherein the nucleic acid sequence is expressed, thereby producing the polypeptide, and recovering the polypeptide from the host cell.

51. (withdrawn) A composition comprising the polypeptide of claim 35 and a carrier.

52. (withdrawn) The composition of claim 51 that is sterile.

53. (new) The conjugate of claim 1, wherein the antibody fragment comprises an anti-IL-8 monoclonal antibody light chain sequence comprising the amino acid sequence of humanized antibody light chain 6G4.2.5v11 (SEQ ID NO: 51).

54. (new) The conjugate of claim 53, wherein the antibody fragment is selected from the group consisting of Fab, Fab', and Fab'-SH modified by one PEG molecule having an average actual molecular weight of about 30 kD.

55. (new) A conjugate consisting essentially of an antibody fragment covalently modified by one or two nonproteinaceous polymer molecules at a free sulfhydryl group of a cysteine residue within the hinge region of the antibody fragment, wherein (a) the apparent molecular weight of the conjugate, as determined by size exclusion chromatography, is at least about 500 kD, (b) the average actual molecular weight of each nonproteinaceous molecule is at least 20 kD, and (c) the antibody fragment comprises an anti-IL-8 monoclonal antibody heavy chain sequence comprising amino acids 1-230 of the humanized antibody 6G4.2.5v11 heavy chain (SEQ ID NO: 60).

56. (new) The conjugate of claim 55, wherein the antibody fragment is selected from the group consisting of Fab, Fab', and Fab'-SH modified by one PEG molecule having an average actual molecular weight of about 30 kD.

57. (new) The conjugate of claim 55, further comprising a leucine zipper sequence.

58. (new) The conjugate of claim 55, wherein the antibody fragment comprises an anti-IL-8 monoclonal antibody heavy chain sequence comprising the amino acid sequence of the humanized antibody 6G4.2.5v11 heavy chain (SEQ ID NO: 60).

59. (new) The conjugate of claim 58, wherein the antibody fragment is selected from the group consisting of Fab, Fab', and Fab'-SH modified by one PEG molecule having an average actual molecular weight of about 30 kD.

60. (new) The conjugate of claim 58, further comprising a leucine zipper sequence.